UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,282	02/14/2000	Dung Le Huynh	230074-0223	6335

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EXAMINER
SONG, HOSUK

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/503,282	HUYNH ET AL.
	Examiner	Art Unit	
	Hosuk Song	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>25 August 2004</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-5,7-35 and 43-49* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *1-4,35 and 47-49* is/are allowed.

6) ☒ Claim(s) *5,8-12,14-19,21,23-26,28-32,43-46* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 09503282

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible

for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has

been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37

CFR 1.114. Applicant's submission filed on 8/25/2004 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

2.   Claims 5,9-12,14-19,21,23-26,28-32,43-46 are rejected under 35 U.S.C. 102(e) as being

anticipated by Bostley et al.(US 6,201,871).

Claims 9,10,11,12,14: Bostley disclose coupling an encryption processor and at least

one authentication processor to a data bus independent of each other in (fig.3#104,103).

Bostley disclose performing encryption on a first data packet within the encryption processor in

(fig.3). Bostley disclose after performing authentication of the first data packet performing

authentication of the first data packet within the at least one authentication processor connected

to the encryption processor by the data bus in (fig.2).

Claims 5,15: Bostley disclose coupling a control unit to a first data bus in (fig.3). Bostley

disclose receiving first and second data packets in the control unit from the first data bus;

coupling a plurality of processors to a second data bus independent of each other and

independent of the control unit in (fig.10,#103-105). Bostley disclose providing the plurality of

processors in data communication with the control unit over the second data bus,independent of

the first data bus, processors including at least one encryption processor and at least one

authentication processor in (fig.10 and col.6,lines 11-29). Bostley disclose providing data of the

of the first data packet from the control unit to at least one encryption processor over the second

data bus in (fig.3,10). Bostley disclose processing data from the first data packet with at least

one encryption processor to provide output data for the first data packet from at least one

encryption processor in (fig.3). Communicating output data for the first data packet from at least

one encryption processor to at least one authentication processor for further processing in

(fig.4). Bostley disclose providing data from the second data packet to at least one encryption

processor and processing the data from the second data packet in the at least one encryption

processor while at least one authentication processor further processes the output data for the

first data packet in (fig.9).

Claims 16-19,21: Bostley disclose a computer having a data storage device connected

thereto, wherein the data storage device stores data in (fig.2). Bostley disclose one or more

computer programs, performed by the computer, for performing encryption on a first data packet

within an encryption processor , and after completion of the encryption of the first data packet,

performing authentication of the first data packet in at least one authentication processor

connected to the encryption processor by a data bus in (fig.2,3,6,10;col.6,lines 11-29). Bostley

disclose encryption processor and the at least one authentication processor are coupled to the

local data bus independent of each other in (fig.2).

Claims 23-26,28: Bostley disclose a computer having a data storage device connected

thereto, wherein the data storage device stores data in (fig.2). Bostley disclose one or more

computer programs, performed by the computer, for performing encryption on a first data packet

within an encryption processor , and after completion of the encryption of the first data packet,

performing authentication of the first data packet in at least one authentication processor

connected to the encryption processor by a data bus in (fig.2,3,6,10;col.6,lines 11-29). Bostley

disclose encryption processor and the at least one authentcation processor are coupled to the

local data bus independent of each other in (fig.2).

Claims 29-31: Bostley disclose a computer having a data storage device connected

thereto, wherein the data storage device stores data in (fig.2). Bostley disclose one or more

computer programs, performed by the computer, for performing encryption on a first data packet

within an encryption processor , and after completion of the encryption of the first data packet,

performing authentication of the first data packet in at least one authentication processor

connected to the encryption processor by a data bus in (fig.2,3,6,10;col.6,lines 11-29). Bostley

disclose encryption processor and the at least one authentication processor are coupled to the

local data bus independent of each other in (fig.2).

Claims 43-46: See claims 5, 16-19,21 rejection above.

Claim 32: Bostley disclose at least one authentication processor performs an integrity

check of output data in (fig.5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bostley et al.(US

6,201,871).

Claim 8: Bostley does not specifically disclose communicating the output data comprises communicating output data over a daisy-chain connection between processors. The examiner takes Official notice that daisy-chain is well known in the art. One of ordinary skill in the art would have been motivated to employ daisy-chain connection in order to eliminate conflicting requests to use the channel(bus) to which all the devices are connected.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 9,16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9: It is unclear how encrypting second data packet is performed prior to completion of authentication of first data packet when first data packet has been encrypted and authenticated. According to currently drafted packet processing step method claim, first packet authentication has been established before processing of second packet.

Allowable Subject Matter

5.   Claims 1-4,47-49,35 are allowed.

Claim 1: Prior art of record does not teach control unit is configured to control at least one encryption processor and the first and second authentication processors such that a first set of data and a second set of data sent from the at least one encryption processor to the first authentication processor and the second authentication processor, respectively, are processed

by the first authentication processor and the second authentication processor while the at least

one encryption processor processes a third set of data.

Claims 2-4,47-49 are allowed because of dependency.

Claim 35: Prior art of record does not teach at least one authentication processor being

coupled to the at least one encryption processor by a second local data bus separate from the

first data bus and the first local data bus and communicating output data for the first data packet

from at least one encryption processor to at least one authentication processor via the second

local data bus for further processing.

Claims 7,33,34,13,20,27 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Hosuk Song whose telephone number is 571-272-3857. The examiner

can normally be reached on Tue-Fri from 5:30 am- 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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